ATTACHMENT J5

Sioux Gateway Airport (ANG) Electric Distribution System

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J5 Sioux Gateway Airport (ANG) Electric Distribution System

J5.1 Sioux Gateway Airport (ANG) Overview

The 185th Fighter Wing (FW) of the Iowa Air National Guard (IANG) occupies 287 acres on the southeast side of the Sioux Gateway Airport, located approximately 10 miles south of downtown Sioux City, Iowa. The mission of the 185th FW is threefold: to provide structure, training, resources, facilities and equipment in support of the total force; to provide equipment and trained personnel to meet the emergency and humanitarian needs of the citizens of Iowa; and to actively participate in local, regional and national initiatives and programs that add value to the Siouxland Community. The unit currently flies the F-16 Falcon. The 185th FW occupies 7 administrative and 38 industrial buildings (no services facilities) totaling approximately 359,000 square feet with 350 full-time personnel. Unit training drills conducted twice each month result in a surge of up to 970 personnel. Plans are currently in development to bring in KC-135 aircraft in the 2004 timeframe. This conversion, if implemented, will require modification to the existing hangar and construction of an additional hangar plus supporting petroleum storage and distribution facilities.

J5.2 Electric Distribution System Description

J5.2.1 Electric Distribution System Fixed Equipment Inventory

The Sioux Gateway Airport (ANG) electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, utility poles, ductbanks, and switches. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

?? Airfield Lighting.

?? Parking Lot Lights.

?? Street Lights.

?? Portions of electric utility system already owned by Mid American Energy

J5.2.1.1 Description

The electric power at the Sioux Gateway Airport (ANG) is provided by Mid American Energy. The system includes both 2,250 linear feet of overhead and 2,380 linear feet of 3-wire and 7,375 linear feet of 2-wire underground circuits. The underground circuits are buried at depths of 3-5 feet and are not marked with tracer wire. There are approximately 2,150 linear feet of conduit encased in concrete, and 2,310 linear of buried PVC conduit. The system to be privatized includes one 225 kVA transformer, thirty 600 A-L overhead switches, five underground switches and no manholes. The system is a branched system (both overhead and underground), is a three-phase system rated at 15 kV, and accepts an incoming voltage of 12kV phase to phase and 7.28kV leg to ground. Base personnel indicate the current capacity is adequate but may not be sufficient to meet the planned expansion of base facilities.

J5.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Sioux Gateway Airport (ANG) electric distribution system included in the sale.

TABLE 1
Fixed Inventory
Electric Distribution System Sioux Gateway Airport (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits (copper)	AWG			
- 1 phase, 2 wire, 15kV, direct bury	#2	7375	LF	1983
- Bare Copper Ground	#4	980	LF	1980
- Bare Copper Ground	#4	280	LF	1996
- Bare Copper Ground	#4	70	LF	1992
- 3 phase, 4 wire, 15kV	#2/0	980	LF	1980
- 3 phase, 4 wire, 15kV	#2/0	280	LF	1996
- 3 phase, 4 wire, 15kV	#2/0	70	LF	1992
- 3 phase, 4 wire, 15kV	#3/0	650	LF	1992
- 3 phase, 4 wire, 15kV	#3/0	400	LF	1996
Overhead Circuits (copper)	AWG			
- 3 phase, 4 wire, conductor	#1/0 ACSR	720	LF	1964
- 3 phase, 4 wire, conductor	#1/0 ACSR	400	LF	1957
- 3 phase, 4 wire, conductor	#1/0 ACSR	300	LF	1979
- 3 phase, 4 wire, conductor	#1/0 ACSR	350	LF	1980
- 3 phase, 4 wire, conductor	#1/0 ACSR	265	LF	1977
- 3 phase, 4 wire, conductor	#1/0 ACSR	215	LF	1988
Transformers	Nom kVA			

Item	Size	Quantity	Unit	Approximate Year of Construction
- Oil filled, pad mounted	225	1	EA	1984
Utility Poles	Height (ft)			
- Wood	40	2	EA	1975
- Wood	40	4	EA	1976
- Wood	45	2	EA	1984
- Wood	45	2	EA	1972
- Wood	45	2	EA	1978
- Wood	50	4	EA	1959
Switches	Type			
- Underground	2-Way	2	EA	1994
- Underground	3-Way	3	EA	1994
- Overhead	600 A-L	3	EA	1988
- Overhead	600 A-L	15	EA	1977
- Overhead	600 A-L	3	EA	1980
- Overhead	600 A-L	3	EA	1968
- Overhead	600 A-L	3	EA	1957
- Overhead	600 A-L	3	EA	1989

Notes:
AWG = American Wire Gauge
EA = each
LF = linear feet
Nom kVA = nominal kilovolt -amperes
FT = Feet
ACSR = American Conductor Steel Reinforced

J5.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
Spare Parts
Electric Distribution System Sioux Gateway Airport (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3

Specialized Vehicles and Tools
Electric Distribution System Sioux Gateway Airport (ANG)

Description	Quantity	Location	Maker
None			

J5.2.3 Electric Distribution System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Electric Distribution System Sioux Gateway Airport (ANG)

Qty	Description	Remarks
1	Electrical distribution system, SC96-GRND-1: TAB U-4A, sheet 35 of 59; TAB U-4B, sheet 36 of 59; TAB U-4C, sheet 37 of 59; TAB U-4D, sheet 38 of 59.	AutoCAD Release Version 2000

J5.3 Specific Service Requirements

The service requirements for the Sioux Gateway Airport (ANG) electric distribution system are as defined in the Section C Description/Specifications/Work Statement. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

Although the duct banks are being turned over to the successful offeror, those ducts not currently used for electrical lines will be reserved for the exclusive use of the government. Additional ducts may be made available to the successful offeror at the discretion of the Contracting Officer**.**

J5.4 Current Service Arrangement

?? **Provider Name** : Mid American Energy

?? **Average Annual Usage (2000)**: 4,607,728 kWh

?? **Maximum Monthly Use:** August: 480,200 kWh

?? **Minimum Monthly Use:** September: 271,200 kWh

?? **Peak demand:** 923 kW and this occurred in June for the year 2000

J5.5 Secondary Metering

J5.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J5.6 below.

TABLE 5
Existing Secondary Meters

Electric Distribution System Sioux Gateway Airport (ANG)

Meter Location	Meter Description
None	

J5.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13 Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J5.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System Sioux Gateway Airport (ANG)

Meter Location	Meter Description
None	

J5.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters (if any). The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

J5.7 Energy Saving Projects

IAW Paragraph C.3 Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes: None

J5.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Sioux Gateway Airport (ANG) boundaries, to include 16 adjacent acres owned by the IANG (total of 287 acres).

J5.9 Off-Installation Sites

No off-installation sites are included in the sale of the Sioux Gateway Airport (ANG) electric distribution system.

J5.10 Specific Transition Requirements

IAW Paragraph C.13 Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Electric Distribution System Sioux Gateway Airport (ANG)

Location	Description
None	

J5.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Sioux Gateway Airport (ANG) electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Electric Distribution System Sioux Gateway Airport (ANG)

Project Location	Project Description
None	